CLAIMS

What is claimed is:

1. (currently amended) A direct heating tube adapted for chromatography which directly heats a fluid during the passage of the fluid, wherein in a desired portion of the tube to be heated, a second heated tube which is connected to a first heated tube is provided outside the first heated tube.

2. (previously presented) The direct heating tube according to claim 1, wherein the second heated tube is provided along a full length of the desired portion of the direct heating tube to be heated.

3. (previously presented) The direct heating tube according to claim 1, wherein the second heated tube is provided in both end portions of the desired portion of the direct heating tube to be heated.

4. (previously presented) The direct heating tube according to claim 1, wherein the second heated tube is provided in one end portion of the desired portion of the direct heating tube to be heated.

5. (previously presented) The direct heating tube according to claim 1, wherein an electrode portion is connected to the second heated tube.

6. (previously presented) The direct heating tube according to claim 5, wherein an electrode portion is connected directly to the second heated tube.

7. (currently amended) The direct heating tube according to claim 1, wherein a change ~~in gradient is provided~~ in a wall thickness of the first heated tube and/or the second heated tube is provided along the length of the first and/or second heated tubes.

8. (previously presented) The direct heating tube according to claim 1, wherein the direct heating tube is a column or a heat tube.

9. (withdrawn, currently amended) A method of heating a fluid passing through a tube adapted for chromatography, wherein in a desired portion of the tube to be heated, by use of a direct heating tube which is constructed in such a manner that a second heated tube connected to a first heated tube is provided outside the first heated tube, a fluid passing through the tube is heated by connecting an electrode portion to the second heated tube and heating the first heated tube.

10. (currently amended) The direct heating tube according to claim 5, wherein a change ~~in gradient is provided~~ in a wall thickness of the first heated tube and/or the second heated tube is provided along the length of the first and/or second heated tubes.

11. (previously presented) The direct heating tube according to claim 10, wherein the direct heating tube is a column or a heat tube.

12. (previously presented) The direct heating tube according to claim 2, wherein the direct heating tube is a column or a heat tube.

13. (cancelled)

14. (previously presented) The direct heating tube according to claim 4, wherein the direct heating tube is a column or a heat tube.

15. (previously presented) The direct heating tube according to claim 5, wherein the direct heating tube is a column or a heat tube.

16. (cancelled)

17. (previously presented) The direct heating tube according to claim 7, wherein the direct heating tube is a column or a heat tube.

18. (cancelled)

19. (previously presented) The direct heating tube according to claim 4, wherein an electrode portion is connected to the second heated tube.

20. (previously presented) The direct heating tube according to claim 19, wherein the direct heating tube is a column or a heat tube.

21. (currently amended) The direct heating tube according to claim 4, wherein a change ~~in gradient is provided~~ in a wall thickness of the first heated tube, the second heated tube, or both is provided along the length of the first and/or second heated tubes.

22. (new) The direct heating tube of claim 1, wherein the second heated tube concentrically surrounds the first heated tube and is connected to the first heated tube by a flange, such that the direct heating tube has a double tube configuration in the region of the second heated tube.

23. (new) The direct heating tube of claim 1, wherein the second heated tube concentrically surrounds the first heated tube, and establishes a void between the first and second heated tubes.